

# THE SAILPLANE *and* GLIDER

Official Organ of The British Gliding Association

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## Official Notice

1935 Gliding Competitions, Sutton Bank,  
August 24th—September 1st

### Classes

CLASS I.—For single-seat machines of unlimited span.

CLASS II.—For machines of span up to 43 feet, and for all machines carrying more than one person.

### Prizes and Awards

**Distance.**—The Wakefield Trophy will go to the British pilot who holds the British distance record obtained between September 10th, 1934, and September 1st, 1935.

CLASS I.—£5 to the longest distance flight during the Competitions; £2 to the second longest.

CLASS II.—£4 to the longest distance flight during the Competitions; £1 to the second longest.

**Height.**—The De Havilland Cup will go to the British pilot who holds the British height record obtained between September 10th, 1934, and September 1st, 1935.

CLASS I.—£5 to the greatest height attained during the Competitions; £2 to the second best.

CLASS II.—£4 to the greatest height attained during the Competitions; £1 to the second best.

**Duration.**—The Volk Cup will go to the British pilot holding the British duration record obtained between September 10th, 1934, and September 1st, 1935.

£4 in addition to the pilot (if any) who beats the existing record by the biggest margin during the meeting.

**Out and Return.**—The Manio Cup and £2 to the best Out and Return flight.

£2 to the best by a Class II. machine.

### Notes

1.—The competitions will be held in accordance with the Rules and Regulations of the B.G.A.

2.—All competing pilots must hold a Competitor's licence; all machines must have a current C. of A., and must be covered against third party risks to a minimum of £1,000.

3.—Class II. machines can enter for both classes, if desired. In the event of insufficient machines being entered in either class to make the classification into two divisions unnecessary, the Association reserve the right to hold the Competitions on the basis of one class only, and to reduce the prizes accordingly.

4.—No distance flight of less than 20 miles or height of less than 2,500 feet will qualify for a prize.

5.—It is hoped to award, in addition to the above, daily prizes, details of which will be announced each morning.

6.—No flight shall win more than one prize.

7.—Competitors are required to bring their own barographs.

Intending competitors who have not yet done so should send in their names at once to the British Gliding Association, 66, Victoria Street, London, S.W.1. We are also asked to draw their attention especially to Note 2, and to say that it is necessary to take out a *special* cover for the meeting.

## The Rhön Meeting

THIS, the world's biggest annual soaring event, takes place from July 21st to August 4th. This year, as last, entry for the competitions is confined to the various local groups of the German Air Sport Association; individuals may not enter, and women pilots are not allowed. The meeting is held at the top of the Wasserkuppe, the highest of the Rhön Mountains in Central Germany.

To get there by rail, one goes first to Frankfurt-am-Main, then by main line to Fulda, and from there by branch line up to Gersfeld, a small country town at the foot of the mountain. Here there are hotels to suit all purses, and it is a 1½ hours' walk up the mountain and 1¼ hours' down. There is a motor road to the top, and an infrequent bus service.

On the summit is a landing ground for aeroplanes; it is on the north side of the road just before the latter reaches the cluster of buildings at the top. Remember that it is 3,000 ft. above sea level, and that the air may be full of sailplanes, some with rather inexperienced pilots. At the mountain-top also is the "Hotel Deutscher Flieger," the most convenient place of all to stay at, but rooms should be booked well in advance, though it has sometimes been possible to get a bed there at short notice.

Other foreign gliding competitions are at Salzburg, in Austria, from July 20th to August 4th (national meeting), and on the Jungfrauoch, in Switzerland, from September 4th to 14th (international meeting). The Russian annual meeting at Koktebel, near Feodosia in the Crimea, usually takes place during September, but we have no information as to the actual dates.

## St. Austell & S. Cornwall Gliding Club

The hon. secretary of this newly-formed club would like to meet any experienced sailplane pilots who may be coming down to Cornwall for their holidays, or otherwise, so that he may have the benefit of their advice on certain proposed soaring sites in his district. Will anyone who answers to this description very kindly get in touch with J. W. M. Graham, Red House, Tywardreath, Cornwall.



## From Here and There

**Sir Alan Cobham's Displays.**—Two of Sir Alan Cobham's touring "circuses" will now be giving aerobatic gliding displays, Mr. G. E. Collins having contracted to appear in one of them throughout the month of July. He is to fly a GRUNAU BABY, not the RHÖNADLER. Meanwhile, Miss Joan Meakin is on tour with another of Sir Alan's displays, and is flying a WOLF sailplane fitted with a wireless transmitter, through which she describes her sensations to the public via loud speakers on the ground.

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**World's Height Record.**—The *Fédération Aéronautique Internationale* has at last recognised Heinrich Dittmar's record flight at Rio de Janeiro last year. It was made on February 17th in the sailplane CONDOR, and the figure now given is 4,325 metres, which is 14,190 feet. Last month we announced that Dittmar had taken the two-seater research sailplane OBS to 8,860 feet with a passenger. We now learn from *Flugsport* that the cable was cast off at 350 metres (1,150 feet), so the height for record purposes is 7,710 feet, which is a little less than either the previous world's record for single-seaters or the British height record.

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**A Display at Renfrew.**—At the Scottish Flying Club's annual pageant, held on June 15th, the programme included a display of aerobatics by Mr. G. E. Collins in his RHÖNADLER sailplane; his performance was, according to the "Glasgow Herald," "perhaps the outstanding feature of the meeting." Mr. Collins gave two displays, at 3 p.m. and 9 p.m., each time being towed by an "Avro" to 2,000 feet before casting off and performing loops, spins and stalled turns. At the evening show he picked up some peculiar lift at 1,200 feet and appeared to hang motionless for a time. Though the crowd applauded lustily, a member of the Scottish Gliding Union informs us, there was still an air of "Hoo did he no' fa' doon wae'oot an engine?" which shows that Scotland has yet a lot to learn.

\* \* \*

**Cross-country Flights from Hornberg.**—This German gliding school in Württemberg will soon, at the present rate of progress, come to resemble a busy airport with machines arriving from and departing for distant aerodromes. This is due to the spreading habit of making "goal flights": i.e. deliberate soaring flights to a given destination. On Whit Monday, there being a weak wind, Wagner, an instructor, landed at Hornberg after a motorless flight from the Hesselberg gliding school, 37 miles to the N.E., while Wolf Hirth flew his MOAZAGOTL from Hornberg to the Teck gliding centre, 22 miles to the S.W., as a return visit to Maier, of Geislingen, who had soared from Teck to Hornberg shortly before. On the same day another instructor, E. Kraft, took up Hirth's old MUSTERLE and landed it 149 miles away. During the previous month two remarkable goal flights were made by Hofmann in his RHÖNSPERBER; he flew from Hornberg to Friedrichshafen aerodrome, 76 miles, on May 11th, and from Hornberg to Zurich aerodrome, 112 miles, on May 13th.

**Dignity and Impudence.**—Among the pilots taking part in a big gliding meeting at Trebbin, near Berlin, on May 28th, were the 65-year-old head master of the local school and a 13-year-old schoolboy.

\* \* \*

**Transferring to Power.**—How long does it take a glider pilot to learn to fly an aeroplane? The Carden-Baynes auxiliary sailplane was to have been test-flown by Mr. Collins, but the Air Ministry insisted that he must first get an aeroplane pilot's "A" license. Mr. Collins, having a few minutes to spare, proceeded to get one. After less than an hour's dual instruction he flew solo in a Miles "Falcon"; next day he did a couple of hours' more solo flying to make up the necessary three hours. This shows what can be done after more than 200 hours' soaring experience. It does *not* show how long the same process would take with an Air-Minded Youth after a Course of Training up to the Standard Required for a Gliding Certificate.

\* \* \*

**A Remarkable Soaring Exhibition.**—Our Swiss Correspondent, Otto Frischknecht, writes as follows from Germany: "During the German aerobatic competitions on May 12th at Stuttgart, a fine soaring exhibition was given by Wolf Hirth on a GRUNAU BABY II., and Karl Baur on the FLEDERMAUS, who were towed by only one 'Klemm' aeroplane from the Hornberg to Stuttgart. While Baur occasionally circled in thermals, Wolf Hirth looped as many as 30 or 40 times until he landed with a final slip. He then took off again by winch, searching for thermals, but he gradually lost height. When he was down to 120 metres (390 feet) above the aerodrome, and everybody thought he would have to land, two soaring birds could be seen circling some distance above Hirth, who followed them, circling with very steep bank, performing one circle within 12 seconds. After 15 minutes he had reached some 1,000 metres (3,300 feet), after which he came down again by looping. The meeting was attended by 60,000 spectators."

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**World's Duration Records.**—A Press message published on June 25th stated that the Russian glider pilot, Ivan Khartashev, has set up a new duration record of 38 hours 20 minutes. He is said to have taken off at Skodnia, near Moscow, during a thunderstorm, and soared before the storm, getting up to 6,500 feet and covering 124 miles. The Russians had already come near to gaining the record last year, when the pilot Simonov soared for 35 hours at Koktebel, in the Crimea, on June 15th. Till now the world's duration record has stood at 36 hours 35 minutes, achieved by the German pilot, Kurt Schmidt, on August 3rd and 4th, 1933, at Korschenruhe, near Königsberg. As we go to press, a flight of 14 hours 57 minutes with a passenger, also at Korschenruhe, is claimed by the Press as a world's record; this is incorrect, however. Early in May this year a Russian gliding instructor, Rastorguyev, stayed up with a passenger for 26 hours 29 minutes, beating a previous two-seater record of 24 hours 10 minutes, made by Suchomlinoff on October 16th last year, also in Russia. The Russian record for soaring with *two* passengers is held by Pleskov with 10 hours 29 minutes.



## The "H 17": An Austrian Light-weight Design



The "H 17" (pronounced "Ha Siebzehn") on the Gaisberg. Note the ease with which one man can carry a wing.

THE theory of Ullrich Hütter, of Salzburg, who designed this interesting and diminutive machine, is that the comparatively slow sailplanes which have been developed in Germany are unsuitable for the Alpine districts of Austria, with their strong and turbulent winds, and that small machines, with high wing-loadings, have advantages in such conditions which go far to compensate for the poorer performance that a decrease in size would normally bring.

Firstly, there is increased quickness of response to the controls, since the inertia of a sailplane varies approximately as the square of the span, while the force exercised by the controls is reduced only in proportion to the linear dimensions. Consequently smaller movements of the control surfaces are needed, and this makes for less disturbance of the air flow when the controls are in continuous use, as in gusty mountain winds, or in soaring over short slopes, or trying to pick up narrow thermal currents.

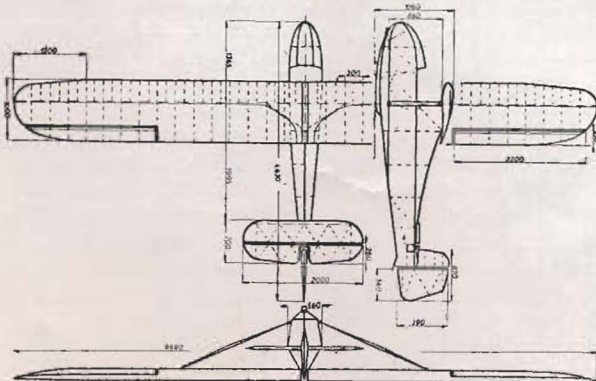
Secondly, "for the same reasons, one can choose a lift distribution which is nearer to the elliptical, and

thus come near to attaining the best possible value for induced drag."

As to the controls of the H 17, the elevator response is said to be about equal to that of the FALKE, while the ailerons are more sensitive and the rudder extraordinarily so. Pilots who are accustomed to make their turns with full rudder must rid themselves of the habit when flying the H 17; nevertheless it has actually circled in *six seconds!* We saw the machine in flight at Salzburg recently, but conditions were not good and we were unable to judge its performance, which is said locally to be the same as that of the FALKE. Once, soaring for three hours in the rear of a cold front, it is recorded to have climbed 800 metres above the start, and to have experienced vertical currents of 5 m. per sec., both up and down. It has been flown for three minutes without touching the controls, when it continued to fly in a straight line.

Dimensions:—Span, 9.7 m. (31 ft. 10 in.); length, 4.63 m. (15 ft. 2 in.); wing area, 9.2 sq. m. (99 sq. ft.); weight empty, 65 kg. (143 lbs.); pilot, parachute, and instruments, 90 kg. (198 lbs.); wing loading, 16.8 kg. per sq. m. (3.44 lbs. per sq. ft.); normal flying speed, 54 km. (33½ miles) per hour; sinking rate, 0.88 m. (2 ft. 11 in.) per sec.; gliding angle, 1 in 17. Wing section, Göttingen 535 over three-quarters of the span, changing to U.S.A. M6 (stationary c.p.) at the tips. Single-spar wings; double "T" spar; plywood leading edge. The struts are of streamlined steel tubing, and are adjustable in length. Full cantilever tail surfaces. The machine can be rigged in eight minutes.

The cost of materials for construction is put at about 500 Austrian schillings (£20). Twelve machines of the type are reported to be under construction by various persons. The construction plans are obtainable for 60 schillings (about £2 10s.) from the journal "Aviatik," Schellinggasse 3, Vienna, 1.





## A Whitsuntide Visit to Sutton Bank

### An "All-Falkie" Entertainment

By CORUNUS

SATURDAY began early with a visit to the Slingsby Sailplane Works at Kirbymoorside. Within the last few months this has grown to really sizable proportions, and we doubt whether even Germany can show a more up-to-date factory to-day. As we walked along between the rows of benches and workers we expected any minute to see the Slingsby thumbs go up to his waistcoat armholes. Amongst a large number of primaries, FALCONS and GRUNAU BABIES going through, we found Buxton's HJORDIS well on the way to completion. One startling feature is the amount of room in a cockpit which, from the outside, looks very small. We doubt if anyone under six feet will be able to reach the controls.

We did not detect any symptoms of the prevailing disease of little-ginitis anywhere.

Up on Sutton Bank we found a wind gusting up to 60 m.p.h., so we went and admired the many improvements to the buildings which have been made since the last competitions. The site is certainly well equipped for this year's meeting.

Towards evening the wind started to drop, and the two-seater side-by-side FALCON III. was brought out and assembled. Slingsby, with that largesse for which he is justly renowned, allowed me to pilot his prodigy, which had made its first soaring flight the day before. A large bevy of reporters sprung up from the earth and clamoured for trial flights, and in due course the Associated Press and I were winch-launched over the edge, the wind being still around 40 m.p.h. and so too high for a bungy launch.

We went over the top at 150 feet without a jar, and in our comfortable and commodious cockpit enthusiasm soon waxed high. She is as steady as a ship, and feels absolutely at home in the air. All the FALCON characteristics are there—the stability and ease of flying, and the general impossibility of flurrying her. The proportions are so good that, in the air, the onlookers frequently had difficulty in distinguishing between us and the single-seater FALCON I. in which Bergel was now launched. The performance of the two machines seemed approximately equal, and in an occasional patch of extra lift we circled up to 1,000 feet.

In the high wind the approach was tricky; one found oneself suspended completely stationary short of the landing ground, sinking at a normal speed, but the—in normal circumstances comforting—habit of a FALCON is to progress stately at its normal flying speed irrespective of the position of the elevator. An attempt to make headway against the high wind by putting the nose down simply resulted in one's sinking speed going up without much corresponding increase in one's forward speed. In ordinary conditions this characteristic will make tricky approaches dead easy. About three reporters later Slingsby took over from an enthusiastic but chilled Corunus, and gave the *Yorkshire Herald* some (for a change) quite genuine thrills coming in.

Then ensued a pleasant evening in which club members from all over the country swapped trials and

triumphs. It is still true that site-getting difficulties are the chief deterrent to the gliding movement to-day.

Sunday was fine and warm, but the wind was just east of south, and a layer of high cloud prevented much instability. Bergel was winched over the South Slope in the FALCON I. There was a 15 m.p.h. wind, but the lift was surprisingly poor, and after a beat or two the bottom fell out and the machine disappeared abruptly. The poor man had over an hour in the South Field in which to concoct an excuse. We understand that a sudden calm overtook him from behind.

After lunch we rigged Hardwick's FALCON II., and during the second of two flights I found a thermal which seemed to extend over the whole area of the landing ground, but the ceiling was only 500 feet. A sudden failure in the lift just left time for a last-minute turn and down-wind landing on the top.

For the rest of the afternoon the Yorkshire Club worked hard winching their HOLS, and we were impressed both by the efficiency of the winch drivers and the steady and snail-like flights extracted from this machine by the members.

Monday proved a hopeless day: easterly wind and cloud down on the Bank. On Tuesday, however, we hear that Slingsby took up many of the members in the FALCON III. and a 40 m.p.h. south wind. Southern readers may be envious to learn that the North celebrates Bank-holiday Tuesdays.

We left with the impression of great possibilities, but of a club seriously handicapped by a shortage of machines. When our elusive subsidy at last arrives we expect big things from the Yorkshire Club.

### "Plus ça change . . ."

READERS may be interested in a piece of exclusive news which has come our way. It concerns the formation of a "Federation of British Gliding Clubs," and we give below a list of clubs supporting the scheme and the names of its proposed officers.

Clubs.	Officers.
Kent ... ..	Capt. C. H. Latimer-Needham
Southdown ... ..	Mr. J. G. Grice
Rochdale ... ..	Mr. E. G. Sanguinetti
Elgin ... ..	Miss R. H. Sinclair
Newcastle ... ..	Mr. R. L. Rolfe
Dorset ... ..	Mr. J. Laver
Eessex ... ..	Mr. D. E. Culver
	Mr. A. York Bramble

We understand the intention is to wait until the subsidy scheme is made public, then announce the formation of the Federation. We invite the Federation to state its policy *now*, before the subsidy scheme is announced.

Note that the Yorkshire, Derbyshire, Ulster, Furness, Scottish Union, Midland, Manchester, Ryedale, Teeside, Channel, and London clubs are not involved.

Note also that, last year, all the above persons (except Mr. Sanguinetti) put their signatures to a memorandum containing the following appeal: "We ask all impartially-minded people in the gliding community to show a united front, and to stand squarely behind the British Gliding Association as the national body that should administer the proposed funds."

Finally, how is it possible for a body of this nature to exist while still affiliated to the B.G.A.?



## Eyam to York in the "Golden Wren"

By R. G. ROBERTSON

IT was late; the official prediction had been for easterly winds; it was 11 o'clock before I had the WREN behind my Alvis, and was chasing cloud shadows, at forty miles an hour, up the road to Camphill.

The preparations and launch were soon over, and I found myself having a struggle to keep in front of the hill, while rapidly ascending or descending, between 300 and 1,000 feet above the start. This seemed to indicate good conditions. I also had the blessing of my co-pilots, so when I found myself at 1,500 feet I decided it was time to leave, and I circled; the familiar landscape slipped away below at great speed.

The Hope Valley went by, and I started on a long journey over wild moorland, with only a few lakes for landmarks; I reached 3,000 feet, then began to descend. I saw a valley ahead, with a village (Stocks-bridge), and a factory occupying all the available space at the bottom; over the valley I turned into wind and, descending rapidly, settled at about 100 feet above the leeward hill.

The outlook was not bright; I had to keep above the hill; I had been 20 minutes since leaving, so I had come 14 miles; I looked for a suitable landing field behind me which I could reach if I did not get any lower, and I decided to circle if and when the variometer showed the slightest rise.

After some time the variometer showed a fraction of an inch rise, and I circled like a cat; the fraction remained, it increased, the gamble had come off, the valley disappeared, the ground receded, the altimeter was moving round the clock. I reached 1,000, 2,000, 3,500 feet, and started looking for clouds, resulting in a prompt drop of 100 feet; by diligent application to the variometer (the machine now has two variometers) I reached cloud base at 4,000 feet and began to get cold, although the cockpit is totally enclosed.

I passed over Barnsley and Wakefield, then began to descend again, and east about north and east; there was much cloud and haze. I noticed the Great North Road, and flew along it for a while, easily outpacing the traffic, and then went off again, passing over Tadcaster, and getting lower, kept a good look-out for villages, red roofed, and surrounded by fields; I should now have seen the White Horse at Sutton Bank, which I was looking for, but for the haze.

At last I had reached the end of my tether; I was bowled out. I came to a railway and a road, with a station and a village, and a field between; the railway staff quickly gathered to watch the fun, and five minutes later the machine was safely tethered, and I was telephoning my friends.

I was at Hessay, five miles from York; Sutton Bank could be seen from my landing field. The farmer was a friend of Watson, who sent the Press to photograph; everyone was very nice; the machine was snugly put away in an immense barn, I had tea, and we returned home.

I had come 52 miles; the Cillon Prize would make possible a second and new machine. The struggle for a "Silver C" was over—but wait, it is now beginning.

## Sailplane Construction for the Amateur

### 6—Glue

By W. BUTTERFIELD

GLUE can be obtained in great variety; it may be in the form of cakes, jelly, liquid or powder. The latter is known as cement. Each variety has its virtues and vices; it is therefore advisable to learn something of its composition and special properties.

The British Engineering Standards Association, of 28, Victoria Street, London, S.W.1, publish Air Board Specifications which explain in great detail the composition, mixing and testing of glues.

By far the most popular grade for our purpose is Casein Cement, often spoken of as Cold Water Glue, or Waterproofed Glue. If in good condition it acquires damp-resisting qualities from the formation of insoluble calcium caseinate at joint of timber. It is easily prepared for use by mixing with clean cold water, and remains tacky for a long enough period to enable the most intricate assembly of parts to be carried out. It hardens under moderate pressure in 12 to 24 hours at a temperature of about 60° F. Joints made with Casein Cement will withstand a shear stress of 1,000 lbs. per square inch of surface, and if subjected to bending will ultimately fail by tearing away the fibre of the timber in the vicinity of the joint. If used on soft light coloured woods it stains the surrounding surface, but this is in no way detrimental to aircraft.

**Mixing Casein Cement.**—An earthenware jar and an old table knife are fine mixing utensils. Measure equal quantities by volume of clean cold water and cement powder, always adding the powder to the water while mixing briskly with the pallet knife until the mixture is of the consistency of thick cream. Allow the mixture to stand for half an hour before use. To avoid waste, mix in small quantities, say one tablespoonful of powder added to one tablespoonful of water; this will cover quite a large surface. As the glue hardens insoluble calcium caseinate is formed, and for that reason never attempt to add new powder to an old mixing of cement. Glue which has been mixed longer than six or seven hours must be thrown away. Always use freshly mixed cement which, if prepared with clean utensils and spread on the joint with the pallet knife, will produce satisfactory work, providing the powder has been kept in an airtight vessel.

**A Simple Test.**—Each mixing can be tested by gluing together two strips of scrap wood and clamping in the usual way. Allow this to harden for 24 hours. You can then test this sample by striking it vigorously against the bench until it fails. The fracture should occur along the fibre of the timber and not along the surface of the joint. If the joint parts cleanly it is a bad one, and all joints made with that cement must be broken and remade.

Good quality cement can be obtained from the firms who advertise in THE SAILPLANE and specialise in aircraft materials. Test specimens have been immersed in cold water for 48 hours, boiled in a pan for half an hour and, after drying again, have been pulled in a testing machine and still been up to specification figures, i.e., 1,000 lbs. per square inch of surface in shear.



## Gaisberg: The Austrian Gliding Centre

**T**HE Gaisberg has been chosen as the headquarters of Austrian gliding partly because of its accessibility, close to Salzburg, and partly because of the new motor road up to the summit. Launches can be made in any direction from the small flat piece of ground at the top, but it is hardly big enough to land on. The one landing ground on the mountain, and that only suitable for experts, is at the Zistelalm Hotel, two-thirds of the way up, where the advanced pupils of the gliding school live and from which most of their flights are made.

To train *ab initio* up to "C" standard in such a place calls for bold measures, but the chief instructor, Herr Munz, has solved the problem with complete success.

The primary training, which is done among the foothills, is on conventional lines, but with the change-over to the advanced course convention has to be thrown to the winds. The pupil, having got his "B" on a ZÖGLING, is given two ground-hops in a FALKE to get the feel of it. He then goes up the mountain, and his next flight is from the Zistelalm. Here he is put into a FALKE on a calm day and told to get down into a specified field, nearly three miles away, at the bottom of the valley 1,800 feet below. This he proceeds to do without the least perturbation, usually making a perfect landing by following the instructor's advice to fly *slowly* round and round the edge of the field until contact is made.

After doing two of these glorified glides, which take about eight minutes each, the pupil is next sent off in a wind to take his "C" either at the Zistelalm or

from the very top, the latter being 2,830 feet above the plain.

Being intrigued by the success of this procedure of suddenly launching from a mountain people who had never been more than a few feet off the ground in their lives, I asked the instructor how he could account for it. He had two explanations: one, that those who live among mountains are so used to looking down several thousand feet that they would as soon do it from a glider's cockpit as from a rigid mountain side. And the other was that the new generation has not the awe of heights that its predecessors had. As against this, I noticed that a pilot who did his "B" flights by following the contours, as one afraid to get up high, nevertheless flew down perfectly in the FALKE from 1,800 feet a few days later.

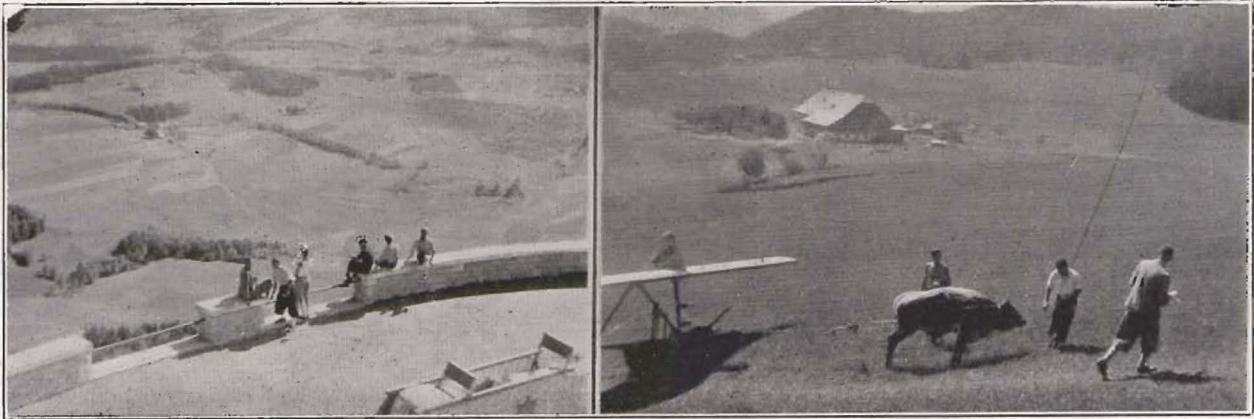
On the evening of my arrival a storm blew up from the north-west and clouds came down on the mountain top. Off went a pupil, just under the clouds, to try for his "C." He sported in and out of the cloud base for 15 minutes, putting the nose of the FALKE down a bit when things got too thick around him, then flew out and made a perfect and unruffled landing in the valley.

One delightful feature of this gliding school is its informality, which is as it should be, for the winds of heaven are not amenable to military discipline. One morning early, a prospective "C" pilot woke up to hear a west wind howling in the trees outside. Although it was 3.30 a.m. and only just getting light, he roused us all out of bed, including the instructor, made us rig the machine, and took off for a beautiful "C" flight just before sunrise.



Top left: a "Falcon" taking off from the Gaisberg summit, S.E. side. Top right: a pupil taking his "C": he was up for over an hour, but had a narrow shave when he got too far back and had to fly between two trees to regain the up-current, just before this photo was taken. Bottom left: a "Falcon" passes through Salzburg on its way back to the mountain after a landing in the plain. Bottom right: a pupil launches one of the Editor's models from the Gaisberg summit, 2,800 feet above the plain.





The primary training ground at Koppl. Left: the advanced group have parked their "Falcon" trailer at a bend in the road up the Gaisberg and are watching the beginners at work 1,200 feet below. (The "Zögling" is just seen as a white streak between the two groups.) Right: method of retrieving the "Zögling" after a "B" flight. (The instructor on the right is retrieving his paper model, which did not fly so far but kept up for longer.) The beginners are billeted in farm houses similar to the one shown.

Whitsun week-end was devoted to a great gathering of the clans on the Gaisberg top. All air-minded Salzburg was there, with the Innsbruck and Salzburg gliding clubs and, of course, our school. In all, three FALKES, a RHÖNADLER, the "H 17," and a KASSEL 20 took the air. The Hütter brothers, the clever designers of the H 17, were there; also Herr Frena, holder of the Austrian duration record of 11½ hours, which he did last year in the RHÖNADLER, concluding it with an hour's thermal flying over Salzburg town.

During the Whitsun gathering, however, the weather being calm and very hot, nobody appeared to make the slightest attempt to use thermals or even to practise doing so, though it is not for me to throw stones after similarly neglecting a magnificent opportunity.

Nevertheless, the thermals were there all right, since a small cumulus cloud remained perched above us throughout Whit Sunday, and it was curious that the wind kept blowing first one way and then the other across the summit, as if thermals were ascending alternately up opposite sides of the mountain. It occurred to me that a sailplane circling round and round the mountain might so time its movements as to catch each thermal in turn.

Frena said that thermals almost invariably break away from the mountain slopes, and hardly ever rise from the valley, and this was certainly borne out by my own glide down from the summit on Whit Monday. Just as the machine took off, duly photographed (see front cover) by Kurt Thalhammer (recently of the London Gliding Club), it was met by one of the periodic gusts blowing across the mountain top, and then, as it went over the edge, a blast of thermal air coming up the slope lifted it about 60 feet. (By this means quite an undeserved reputation as a pilot was acquired, since none of the others had the same luck, and could only dribble over the edge in a flat calm.) A little later, when the lower slopes were underneath, the altimeter showed no change at all for about a minute on end. Then, still having over 2,000 feet of height in hand, I went for a circular tour round the town of Salzburg. Here there seemed to be a general subsidence to compensate for the up-currents over the mountains, and the houses appeared to be coming up so fast that I took a short cut across the centre of the town to reach the landing field. It was a wonderful experience, gliding down in a dead calm for 13 minutes on end.

As everybody flew down to the same field, and we all helped to dismantle each other's machines, there was a thorough mix-up; I lost a couple of bolts and the Salzburg club lost their pliers; everyone accused everybody else, and, in fact, one might have been at D—e but for the fact that the pliers were called *Zangen*.

To conclude with practical details; there is only one more advanced course this year, starting on August 10th. Beginners' courses start on August 10th, September 1st, and September 25th. The inclusive fee for three weeks' course, board and lodging and third class fare to and from London, is £16 18s. for beginners and £21 8s. for the advanced. In the beginners' course you get the usual training in unusual surroundings. In the advanced course you get the opportunity of going off really dizzy heights, probably dizzier than any you could find at home. The method of landing always at the bottom has its disadvantages, but at least ensures that every flight is of respectable length, even if there is no wind. Actually, it takes about two hours to bring a FALKE back to the top, and 10 minutes to rig it. If this tries your patience, go down with the retrieving team and get a free motor ride along one of the finest motor roads in Europe.

A. E. S.



An early morning idyll: pupils of the advanced course at breakfast in front of the Zistelalm Hotel, the "Falke" ready at the launching point, the wooded soaring slope, the plain 1,800 feet below, and the Alps beyond.



## News from the Clubs

### Yorkshire Gliding Club

**Jubilee Week-end, May 4th to 6th.**—Proper soaring winds again failed to arrive, but the otherwise glorious weather and good company made the meeting a thoroughly enjoyable one. The winch was in constant use for passenger flying and training, and Holdsworth's supply of skids was not unduly depleted. The best performances of the meeting were put up by Coltman and Neilan on Sunday. The former, flying ALBATROSS, obtained his "B" and was then launched over the west slope into the lightest of breezes. He soared for 15 minutes, when it was observed that at the hangars the wind had changed completely round, and was now blowing down the hill. Jubilee flags were fluttering definitely from the east, only 70 yards from the hillside. Coltman continued to soar under these conditions for another quarter of an hour or so, after which he landed on top. In the meantime Neilan, who took his "B" the previous day, was launched into these very thermal conditions in HOLS, which he promptly took up to 250-300 ft. and stayed there for a quarter of an hour. A couple of "C's" on thermals within half an hour. Altogether a very jolly three days. We were particularly glad to have with us our friends from Leicester and Huddersfield and hope they will come again very soon.

**Saturdays and Sundays, May 11th and 12th, 18th and 19th, June 1st and 2nd.**—Three week-ends of vigorous activity in training and passenger carrying, relieved by joy rides on the winch for patient "C" pilots. The only active machines were DICKSON, HOLS I., STEDMAN two-seater, and occasionally the B.A.C. two-seater, so that is a kind of "calm before the storm" atmosphere. The two FALCONS (single and two-seater) are waiting for a soaring wind, while HOLS II. and PROFESSOR are undergoing overhaul in the workshop.

**Whitsuntide Meeting, June 8th to 11th.**—The best feature of these "meetings" (though our insurance company salt us unmercifully in respect of same) is the way visitors and distant members turn up determined to enjoy themselves and at the same time help us in every possible way. The distinguished bag on this occasion included P. A. Wills, H. C. Bergel, C. E. Hardwick, G. M. Buxton, L. C. Dugdale (who once again acted as time-keeper very competently), and last, but not least, the Heavy Squad from Huddersfield, who have decided to join the club because, as they say, they have to do the work, anyway.

Flying started rather late on Saturday as we had to wait for the violent westerly gale of 60 m.p.h. to moderate. At about 5.30 p.m. both Wills and Slingsby found it possible to stand upright on the edge of the hill, and decided that it had moderated to 40 m.p.h. or so. The FALCONS, *père et fils*, were brought out, the single seater being soared for lengthy periods by Slingsby and Bergel, who seemed to find soaring in thermal conditions rather fun.

In the meantime the two-seater FALCON was given three soaring flights with representatives of the Press as passengers. The first two were piloted by Wills and the last by Slingsby, and the average duration of each flight was about half an hour.

On Whit-Sunday and Monday a light southerly wind made soaring impossible for all but the elect. Bergel tried to scramble into this category, but the wind basely let him down and he had to land at Kilburn. This in FALCON I. In Hardwick's FALCON II. Wills had better luck, managing about 25 minutes, including a lot of thermal circling. Throughout both days a good deal of training was done and machines were pulled into the air in quick succession by the winch.

**Whit-Tuesday** brought a satisfying south wind of 30-35 m.p.h. Unfortunately, Wills, Bergel, and Hardwick had left us, as they had to re-apply their noses to the grindstone, but FALCON I., FALCON two-seater and STEDMAN two-seater were kept busy from morning till dusk. Slingsby flew the FALCONS perfectly, and Neilan took FALCON I. up to 1,500 ft. after he and Stedman had spent 1 hour 17 minutes in the STEDMAN two-seater. Nearly every member present got into the air for a soaring flight by some means or other, either solo, dual or passenger. Which is all as it should be.

**Saturday and Sunday, June 15th and 16th.**—On Saturday training was done in a flat calm, Alderson, Blakeston, and Wordsworth practising turns and circuits in the HOLS; the last named, incidentally, getting his two "45's."

On Sunday a light wind veered from S. to S.W. and all available machines soared, including the two two-seaters, FALCON I. and HOLS I. Training proceeded throughout the day.

Wordsworth took his "B" with 2½ minutes, and later his "C" with 8 minutes, followed by a landing on top after a somewhat hectic approach in which he showed great resourcefulness. He is the first of a new batch of "C" pilots trained at the top of Sutton Bank, without any slope flying whatever. He took his "A" about eight weeks ago.

**Wednesday, June 19th.**—Brother Collins decided to partake, and went up in FALCON III. with Slingsby, after which Collins took it up with a passenger, the duration of each flight being about 20 minutes. By the way, on this day, apparently, some person or persons more or less unknown wrote "Sale Price, 3/11" on our ground hopping DICKSON. Will said person or persons please send the money and an empty trailer at the earliest moment, together with a 50 ft. high efficiency full cantilever sailplane complete with "conservatory" in part exchange?

**Friday, June 21st.**—PROFESSOR rigged after overhaul and taken up for test by Neilan, who did two hours in practically no wind, reaching 650 ft.

**Saturday and Sunday, June 22nd and 23rd.**—A light south wind on Saturday morning backed to east during the afternoon and, apart from one short soaring flight in PROFESSOR, the day was devoted to training. The ritual of wiping off and replacing the skid on HOLS I. was again solemnly gone through. A forest of ash and rubber trees is to be planted along the fence, and a shrubbery of hemlock and deadly night-shade will shortly appear in front of the club house.

On Sunday the east wind and heat wave persisted. High winch launches were the order of the day. Stedman took up passengers, HOLS occasionally found a bit of thermal lift, and DICKSON I. ground-hopped stolidly, despite shameful ill-treatment on one or two occasions. DICKSON II. has been brought up to Sutton Bank and will replace DICKSON I. after repair and complete overhaul.

### Derbyshire Gliding Club

**Sunday, May 19th.**—Wind S., 15 m.p.h., dying to 5 m.p.h. and backing. Continuous drizzle.

Slater and Smith had one flight each in the GOLDEN WREN, just to show that they didn't mind the rain, but it was not much fun, and the maximum height obtainable was 350 feet. The ALBATROSS arrived from Leicester, but was not flown as the wind was by this time impossible. Flying time 1½ hours.

**Friday, May 24th.**—Slater sneaked in a flight in the evening (it being his week-end on duty) in a very strong E.N.E. wind at Cocking Tor. He approached to land by a novel method, i.e. by hovering over the landing field at 35 m.p.h. still in the lift, slowing down to 30 m.p.h. and drifting backwards out of the lift, then increasing speed again slightly to sink on to the field. Maximum height 1,000 feet. Flying time 1 hour.

**Saturday, May 25th.**—Wind E.N.E., strong as yesterday. Robertson and Smith had one flight each at Cocking Tor. They both enjoyed themselves but nothing of particular interest happened. Maximum height 1,600 feet. Flying time 2½ hours.

**Sunday, May 26th.**—Wind again E.N.E., not quite so strong, say 25 to 30 m.p.h. We had an interesting illustration of the fact that one cannot judge the conditions from the ground; or, in other words, the Lapse Rate varies according to a law of its own, and not as we ordinary mortals would expect.

Briefly, what happened was this: Slater flew at 9.30 a.m. before the sun was out, and reached a maximum of 500 feet; conditions very bumpy indeed. Smith flew at 10.30 a.m. when it was a bit warmer and the sun was beginning to show, and reached 1,300 feet; conditions not so bumpy. Robertson flew at mid-day when it was a bit warmer still, and reached 1,500 feet. He landed about 4½ miles away after making a practice cross-country flight, and the machine was not retrieved and rigged again until about 4 p.m. By this time the sun was blazing down, and it was really quite hot. Very well; Smith set off with great hopes . . . and almost went to the bottom. He did actually reach 500 feet, but it was a struggle, and the average ceiling was about 200 feet. The bumps were again colossal and the variometer went mad, never staying at the same reading for more than one second at a time. The wind strength was practically constant throughout the day. Flying time 4½ hours.

Now then, you meteorologists, explanation please!

**Whit-Sunday, June 9th.**—Wind S., about 15 m.p.h. Training all day at Campbill Farm. Our *ab initio*s are reaching a stage where they can be sorted out now, and some given a stronger



launch than others. A winch will soon be ready, and great things are expected of it, especially in conjunction with the Manchester B.A.C. VII.

Robertson, Smith and Slater flew the GOLDEN WREN over Eyam Edge. Some thermals were about, but they were few and far between, although Robertson once got up to 1,800 feet and made a journey of two miles or so up wind. However, nothing else was to be found, and he got back to the hill with 400 or 500 feet to spare. Flying time 5½ hours.

**Whit-Monday, June 10th.**—Training at Camphill, several Manchester members being present, including Meads, who very kindly took over the instruction. Coltman flew the ALBATROSS from Eyam Edge, but the wind was poor and, after a struggle, he went to the bottom.

**Tuesday, June 11th.**—Robertson's great day. His flight is described in detail elsewhere, but a few additional remarks here may be useful. The wind was very strong indeed, 35 to 40 m.p.h. at least. During his preliminary hour over the hill it was obvious that he was having to fly at an abnormal speed to stay over the hill at all. One feels that he might have found more lift if he had got away earlier, as the sky was becoming thicker and thicker with cloud; in fact, shortly after he had gone away it was completely overcast, a condition that surely cannot be very good.

Congratulations on a very fine flight in conditions far from ideal.

**Sunday, June 6th.**—Wind W., strength variable. More training at Camphill; also GOLDEN WREN over Bradwell Edge.

Smith took off in the lull after a storm, and for a time was fighting for inches to keep up at all. However, there was a huge bank of cumulus approaching on the far horizon, and as it got nearer the wind freshened a little and enabled the WREN to maintain a height of 500 feet or so. Just after the thickest of the cumulus had gone over, a strong thermal was picked up which took the WREN up to 2,000 feet (circling, of course). From this height an obvious Cold Front was just visible on the horizon, but we were down to 800 feet again before it got near and, in spite of all efforts, no more lift could be found. Smith landed after the storm had gone over, having thoroughly enjoyed himself, but feeling that he knew considerably less about Cold Fronts than previously.

Could it be that the lift in front of the storm was so far ahead that the Front was only just visible, or was that just an isolated thermal that he was lucky to pick up, or wasn't there any lift in front of that particular storm, or what?

Meteorologists, again, please, one pace forward!

## Newcastle Gliding Club

We have now decided to report, for a change, on flying activities instead of building operations. Those few stout-hearted members who have worked throughout the winter months building the hangar and clubroom, then overhauling machines, have now the reward of seeing other members flock up to take their places at the clubroom table, and share their flying. Being real clubby fellows they do not resent this. It is what they have been working for.

**Sunday, June 9th.**—Wind S.W., 15 m.p.h. 14 launches. Bennett, W. Taylor and Wood made their first flights. Very encouraging crowd of spectators. Several enquiries.

**Whit-Monday.**—Thick mist and rain. Day abandoned at 2 p.m.

**Wednesday, June 12th.**—Wind S.W., 17 m.p.h. A tinkling of telephone bells completed arrangements between the stout-hearted ones to steal away to Mootlaw and get some extra flying. Twenty-eight launches. Miller's much discussed seat was abused in a more practical manner by Bennett, and stopped flying.

**Friday, June 14th.**—Constructional work on CRAMCRAFT in Newcastle.

**Sunday, June 16th.**—Wind S.W., 5-15 m.p.h. New and improved seat made and fitted by Bell. Record attendance of members. Feeny, Cummings, Angus, Burningham and Allen made their first flights. Cummings very promising. Forty-seven launches. Experiments made with greased launching board.

**Monday, June 17th.**—Bell, Bennett, and Feeny working on CRAMCRAFT in Newcastle.

The liquor licence is slowly maturing as we hear the local Bobby has been up to measure our buildings. We made a start with minerals, and the secretary had a happy day counting the proceeds of these and the teas. It nearly broke his heart to see members spending money at the "Black Bull" in Matfen, because the authorities do not appreciate a glider pilot's thirst.

Messrs. J. H. Holmes & Co., Ltd., have very kindly offered to provide electric current for the club buildings and flying field. A

4 k.w. generator, which they are supplying for use at the Royal Agricultural Show in Newcastle next month, will be delivered to Mootlaw after the close of the show, and loaned to the club indefinitely. We are greatly indebted to Messrs. Holmes.

Allan, home from Cambridge, has agreed to assist Hick on his sailplane, in an endeavour to get this in the air as soon as possible.

We take this opportunity of inviting those members who have been slacking for so long, to show up and take on the job of lining the sleeping chalet and fitting the bunks.

## Southdown Gliding Club

An Empire Air Display was held at Devil's Dyke by the Southdown Gliding Club, through the medium of the Air League of the British Empire, on **Sunday, May 26th**. The meeting was quite a success and we hope will be the first of many more.

As early as 8 o'clock saw the arrival of some members, and by 10 o'clock everything was ready to start. Jameson was auto-towed in the PRÜFLING and he flew over to the main north slope where he soared for a short spell. However, the wind dropped momentarily and he had to land on top. In the meantime the TWO-SEATER was besieged by Press photographers, who insisted that about a dozen enthusiasts should help a member of the fair sex into it.

The wind had by now freshened and Hatcher was launched, with the bungy, in an attempt to get his "C." This he got with a very fine flight of 14 minutes, in which he showed that he certainly knew how to handle his PRÜFLING. He then lent his machine to Armstrong who, as he was launched, was described as a beginner trying to get his "C," much to the amusement of the members. Armstrong proceeded to show the public that he was not a beginner, and tootled over to Small Dole.

The TWO-SEATER had by now been rescued from the Press (they seemed quite uninterested that we were actually going to fly) and Little was launched. He went off down the ridge towards Small Dole, and, after a time, came back in the company of Armstrong, who landed the PRÜFLING at the launching point. He must have sensed something was up, for not five minutes afterwards the wind dropped. Little made a gallant attempt to land on top, but failed by ten yards, and landed on the slope (gradient about 1 in 1). He was pounced on by the Army, who were holding a field day or something, and they demonstrated that they were ready to meet any emergency, even when it comes to holding gliders down.

The secretary then announced that passenger flights could be obtained in the TWO-SEATER, whereupon he was nearly knocked over in the crush for tickets which followed. The TWO-SEATER had the hardest day it has ever had, giving aerial baptisms to people of all ages, shapes and sizes. The Chrysler, which generally gets temperamental on such auspicious occasions, ran perfectly, pulling the TWO-SEATER up with such zeal that on one flight it took up the army communicating telephone line with it. The matter was hushed up by quietly hacking off the offending line, and carrying on as though nothing had happened.

On the north slope the wind was rather inconsistent, which rather troubled the pilots, but amused the public. Jameson was launched for another attempt at his "C," but the wind must have spotted his profile, for it let him down with a bang, and it took ages to get him to the top again.

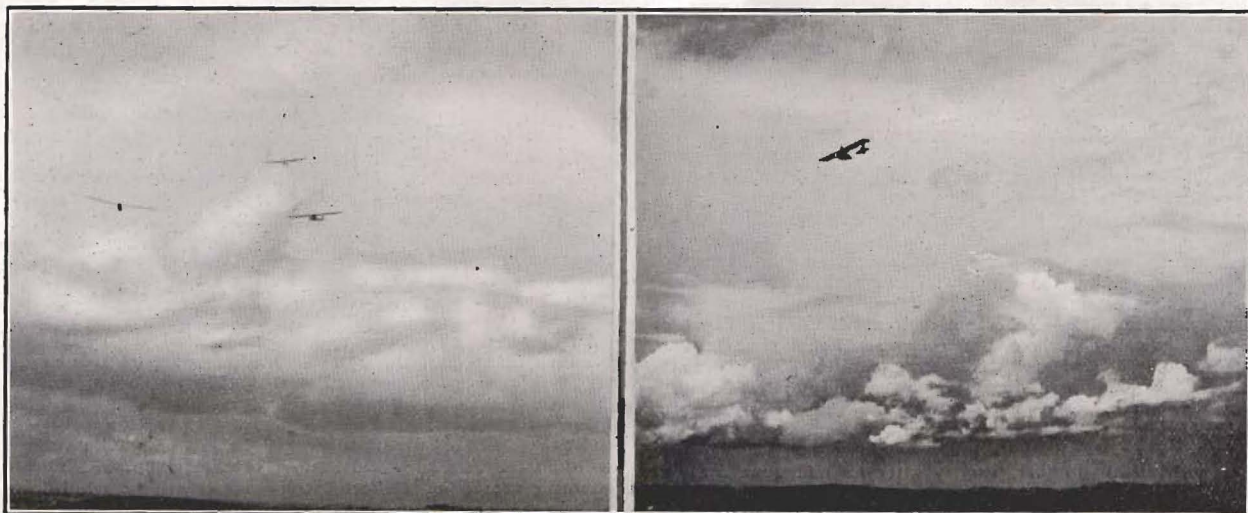
At 3 o'clock in the afternoon, all according to plan, Flt.-Lt. Mole brought over a "Drone" and put it through its paces. After thoroughly impressing everybody he came down and stayed with us for a time.

The nacelled DAGLING took off with Palmer, who, after 4½ minutes, came down and performed a rather novel pirouette on the cabane. Joking apart though, it is rotten luck to have waited years for your "C," then to get flung on your back when you've nearly got it, by failing wind and impossible landing ground. The machine was practically undamaged and more flights followed, the last one putting an extra furrow in an already ploughed field below.

In the meantime, the TWO-SEATER was still hard at it, until the cable broke while at a low altitude, and Little had to make a steep turn to avoid some trees. He missed them, but in coming down in a ploughed field the undercarriage was torn off. Needless to say there were many disappointed people, but even if the machine had been undamaged we could not have taken them all up as we hadn't navigation lights.

The PRÜFLING was auto-towed to quite good heights by Hatcher and Jameson, but after four flights the sun sank down below the horizon, so we took the machines back to the hangar and dismantled in the dark.





Soaring at Dunstable on June 16th, the day of thunderstorms. Left: four sailplanes soaring together (but one has unfortunately disappeared in the process of enlargement). Right: the "Dagling" pretending to be a high-performance sailplane.

### London Gliding Club

**Sunday, May 26th.**—In a north-easterly wind no soaring was possible, and the winch was used instead. By means of it the RHÖNBUSSARD and GRUNAU BABY went up several times with various pilots, and Collins took the KASSEL two-seater up with a series of passengers. On one of these launches the cable broke at the bottom end and the KASSEL toured round with some 200 feet of wire hanging below; in spite of the release hook being open, the ring refused to fall off because the wire trailed along behind instead of hanging down vertically. There was a bright flash as it (the wire) touched the high tension cables, but apparently none of the electricity thought of going up it to see what there was at the top. On the next flight the wire broke again, at the point where the flash had previously taken place; this time Collins came down in a series of the tightest turns we have ever seen; evidently the autogiro is not the only type of aircraft that could be landed safely on a tennis court.

**Saturday, June 1st.**—Both the steel and wooden hangars have now been moved to their new site to clear the way for building operations, and as we are now one large hangar short there is a great scarcity of accommodation. Ground-hopping went on all day in a S.E. wind.

**Sunday, June 2nd.**—Wind still unsuitable for soaring. Three groups of ground-hoppers were all very busy throughout the day. In the evening the wind improved and soaring started with Nicholson in the GRUNAU BABY. DAGLING, FALCON, and PRÜFLING quickly followed, and flying did not stop until darkness fell at 10 p.m. A total of about seven hours was done.

Work has now started on the new building.

**Wednesday, June 5th.**—There has already been some sporadic mid-week flying earlier in the year, but it has now started regularly in real earnest, and to-day 22 people ground-hopped till dark.

**Saturday, June 8th.**—A very gusty westerly wind.

From a field nearer Dunstable, Collins was towed off in his RHÖNADLER by an "Avro 504 N" to attend the London Aeroplane Club garden party at Hatfield, where the high winds had disturbed the "power programme." In fact, his was the only item on the programme to begin at scheduled time. He arrived with plenty of height and proceeded to get rid of it by a series of loops and stalled turns, thus belying one visitor's prophecy that he would not be down for at least an hour and a half. To keep the RHÖNADLER on the ground when it got there, the elevators had to be used until assistance arrived.

At Dunstable Downs conditions were unpleasantly rough, and flying had to be restricted somewhat. Sproule reached 1,250 ft. in the GRUNAU BABY, which was also flown by Ivanoff, Dewsbery, Baker, and others. In the evening this machine was landed by Richardson at Dagnall, about four miles away, and had to return by trailer. The PRÜFLING, FALCON, and SCUD II. also soared for varying periods, and Davis took his "C." Total flying time, 10½ hours.

**Sunday, June 9th.**—Flying commenced at 8.30 a.m. and there was almost a complete flat calm until mid-day, when the wind got up from the east and hill-top flying became impossible. But before it did so, McIvor, Bullwinkle, Fowley, and Williams

qualified for "A" certificates and Ellis completed his tests for "B." During the rest of the day three machines were kept busy ground-hopping.

**Monday, June 10th.**—Wind again unsuitable for soaring, but there was great ground-hopping activity. During the 2½ days, June 8th, 9th, and 10th, over five hundred flights were made.

In the evening Wills and Bergel returned from Sutton Bank with glowing accounts of the new Slingsby side-by-side two-seater.

**Saturday, June 15th.**—The PRÜFLING returned looking very smart after a complete overhaul by Zander & Weyl, who also delivered to Barker a new enclosed trailer for his SCUD II. Soaring winds were still lacking, but primary instruction went on all day.

**Sunday, June 16th.**—Flying commenced at 6.30 a.m. Ellison qualified for his "A" certificate, Horrell for his "B," and Rattray his "C." Unfortunately the PRÜFLING and one of the DAGLINGS were damaged early in the day, and this restricted activities as far as new certificates were concerned.

Wills and Bergel flew SCUD II. on several occasions, and reached altitudes up to 2,000 ft. Barker was also very active in his green SCUD II. The RHÖNBUSSARD was flown by Cooper, Nicholson, and Dewsbery, the GRUNAU BABY by Ivanoff, Sproule, Petre, and Baker, and the FALCON by pilots too numerous to detail. The nacelled DAGLING was also seen at considerable heights during the day, and Hiscox soared the WESTPREUSSEN during the afternoon.

The day's flying was considerably disturbed by no less than four thunderstorms which, in spite of all efforts by Dewsbery in the RHÖNBUSSARD, Wills in SCUD II., and Ivanoff in GRUNAU BABY, failed to provide any appreciable lift. Wills reported that the only lift he got was due to reinforcement of the slope up-current by the gust which came just before the rain, and there was no roll-cloud preceding the main body, the clouds looking pretty amorphous and not conforming to text-book. Experts who watched the proceedings were heard to mumble intelligently about "occluded fronts," but when drawn failed to offer further information.

Flying ceased at 9.30 p.m. with a total of 14½ hours' soaring.

**Saturday, June 22nd.**—Wind south-east, temperature colossal. The new swimming pool (up by the Bowl) proved a strong counter-attraction, except for the ground-hoppers. It appears that good soaring pilots are good swimmers, which bodes well for the future of cross-channel and trans-oceanic flying!

**Sunday, June 23rd.**—Still too hot, except for the incredible enthusiasm of the ground-hoppers under Humphries, who refused to notice the heat wave. Major Shaw and F. Slingsby visited us by air. Other welcome visitors were Mr. and Mrs. Mackie, from the Ulster club.

Mid-week flying becomes increasingly popular and good progress is being made. On June 12th, Gardner, Horrell, and Gillet got "A" certificates, and on Tuesday, June 18th, there was four hours' soaring.

The new building has now been under way (weigh?) for four weeks, but so far it is still below surface level. However, the steelwork is expected shortly and then progress should be more apparent.



### Dorset Gliding Club

**Maiden Newton, Saturday, June 1st.**—Owing to the wind coming from south-east (rather unfavourable for this site) Lansdown took the DAGLING down to the bottom for training.

Rolfe (team captain) tried out things with a short flight, and also this being the first time he had tried the machine with a weight in the front, he reported that its flying trim was very satisfactory. A large number of launches were then given, the pilots being Aldridge, Gaunt, Lock, Manning, and Shelton.

**Sunday, June 2nd.**—There was plenty of wind from the south-west, and as this enabled launches to be made from the best slope it was hoped to obtain a couple of "B" certificates, although this was not quite achieved.

Rolfe led off with a straight flight followed by Lansdown, who did an observed flight of 74 seconds, and then made an attempt to get his "B." But as the wind was rather rough he did not quite fulfil the necessary conditions, and in another attempt could not get in both the turns. Later on Rolfe tried out another route, doing 76 seconds, and this led to Lansdown following him and, in a flight of 74 seconds, qualifying for his "B" licence.

After dinner Laver did a flight of about two minutes; later, about tea time, the wind increased and he made a long soaring flight of 1 hour 24 minutes, following it with another of nine minutes, all these being done in the DAGLING. These soaring flights proved such an attraction that the ground was soon crowded with spectators, and numerous cars also stopped to watch. During this time a roaring trade was done in selling copies of "The Silent Wing" to the spectators who wanted to know how it was done, thereby helping the club's finances. There were numerous inquiries about joining the club, and several entrance forms taken by inquirers.

In spite of the smaller number of launches there was a considerable increase in flying time, which for the day amounted to 1 hour 42 minutes, with only nine launches. The fact that the DAGLING soared so well at about 200 to 250 ft. above the crest of the hill, showed that it is in really good flying trim.

**Saturday, June 15th.**—The weather was rather stormy, but between the showers some useful training was done in the moderate south-west wind. After Lansdown had taken the DAGLING down to the bottom with a flight of 52 seconds, the launching gear and car descended and a site was chosen. This was tested by Shelton, then Clewlow and Manning had launches. A lengthy rain storm followed.

After tea conditions improved considerably, and launches were made from some way up above a spur of the south slope (known in the club as "The Pimple"). Shelton made three short flights, 28, 31, and 33 seconds, then Mr. Manning had his first flights from any real height, and did very well in flights of 18, 26, and 27 seconds. So the next two launches were made from still higher up. At first, flying rather fast, he only did 28 seconds, but made no mistake in the next one, which was a very steady 32 seconds, thus gaining his "A."

**Sunday, June 16th.**—Those who spent the night on the site started early, Lansdown taking the machine down to the valley bottom in a flight of 65 seconds. Before the storms arrived some useful training was done and, from just above the Pimple, Lansdown, Shelton, and Manning had short flights. During the ensuing storm the machine was put in the shelter of the hedge, and we had lunch under the wing. Soon after two o'clock Shelton tried out conditions with a short flight a little way up the slope, and as things were rather rough for elementary training the machine and launching gear were taken up to the top for Shelton to have a shot at getting his "B" licence. By the time things were ready the wind had increased considerably, so his attempt was postponed, and the DAGLING was taken up instead by Laver, who soared it at about 150 ft. for one hour, the flight only terminating with a drop in the wind. After this, Shelton made the three necessary flights for his "B" certificate, his times being 63, 63, and 70 seconds. As the wind was still too rough for training, Lansdown (team captain) had two very spectacular flights from the top, doing 88 and 86 seconds.

Although it was rather late, the launching gear was rushed down below for the much delayed training, and from a little way up the slope Walden and Clewlow each had a couple of short flights; then for the beginners the gear was shifted still lower and Gaunt and Crow each had flights. As it was now after 10 p.m., tracks were made for the hangar, thus closing a very successful week-end; one "A" licence, one "B" licence, and a soaring flight of one hour, all on the old primary glider, and several students very nearly ready to take their "A's." It is hoped to have the DORSLING out at Maiden Newton so that we can make more use of the winds favourable for soaring.

### Kent Gliding Club

We celebrated the return of the south-west winds in good style, with Richards, Brunning and Gelston all qualifying for their "A's." They each had a trial flight on COLUMBUS first, and then the B.A.C. I. was brought out and launched behind the brow of the hill. Richards went first, flying steadily over the Pilgrims' Way, and landing at the far end of the opposite field after holding off until the last possible moment. Brunning followed with a flight of 35 seconds, and then Gelston made an attempt. It was the first time he had flown the B.A.C. I., and although he cleared the Pilgrims' Way he failed to gain his ticket by three seconds. He was launched again, however, gained plenty of height, and made a fast but successful qualifying flight.

It is always something of an adventure for our beginners to get their "A's," with the obstacle of the Pilgrims' Way confronting them. Training is confined entirely to one or other of the fields, and when the member is ready for his ticket he has to make a flight nearly twice as long as any he has previously attempted, clearing two terrifying hedges with a path between.

If the south-west winds continue, Richards, Brunning and Gelston should soon qualify for their "B's," while Potter, Draper, Miller and Cross are all well on their way towards their "A's," and several new members have started ground-slides.

### Leicestershire Air Sports Club

**Saturday June 8th.**—Our newly-completed PRÜFLING was taken to Six Hills and was given a good trial over the week-end, flying very nicely to the satisfaction of all.

**Monday, June 10th.**—Coltman flew the ALBATROSS for 30 minutes at Eyam in a very high wind. The pilot had a rough time, but got in a few steep turns before finally landing in a vest-pocket field adjoining a road. Coltman, by the way, has bought the B.A.C. "Drone" in which Herr Kronfeld flew from London to Paris.

**Sunday, June 16th.**—Six Hills. Practice was carried out in heavy rain and thunderstorms, such is the enthusiasm of our members. The ALBATROSS and PRÜFLING gave a good display and kept the many spectators keenly interested. We had many enquiries regarding membership, and expect to enrol more members.

### Pwllheli and District Gliding Club

We have been meeting each week until May 16th. On this day we received our new car, a Chrysler, and the increased power enabled us to do much better. We had several good hops to 50 feet up. Miss Fowden Jones and Roberts did very well, but we finished up with our first bad crash. Miss Fowden Jones at 20 feet slipped off the rudder bar and pulled the machine vertical; she crashed on the starboard wing, then wiped the nose off, and turned over on the cabane, coming to rest on the port wing leading edge; finally, the tail snapped off. The pilot had her leg rather badly cut. Two or three members have worked hard on the machine, and we hope to be ready to carry on in about two weeks' time. We have had good experience in the re-building, and the crash has taught us to go slow. We are very pleased that we have gone in for cable launching, and find that we can operate with only three members if necessary.

### St. Austell & South Cornwall Gliding Club

At a meeting held at Par, Cornwall, on June 5th, it was decided to form a gliding club for South Cornwall, to be called the St. Austell and South Cornwall Gliding Club. A committee and officers were elected, and it was decided to acquire a set of drawings of a DAGLING primary, and to commence construction as soon as the drawings and materials could be obtained. In the meantime members are scouring the countryside for the most suitable training ground, and by the time the primary trainer is built it is hoped that a suitable ground will be available and that flying will commence before the coming winter.

The few members responsible for forming this club are tremendously enthusiastic, and their greatest ambition will be to fly up in a sou'-westerly wind one day and visit the London Club at Dunstable.

Anyone desiring further information should get into touch with the hon. sec. of the new club, Mr. J. W. M. Graham, of Red House, Tywardreath, Cornwall.



## Midland Gliding Club

Primary ground-hopping continues at Handsworth in the lower field, the hill still being under hay. The more advanced members, who are operating at Castle Bromwich Aerodrome on Tuesday and Wednesday evenings, are, however, expectantly looking forward to a return to the hill in the near future, where they are hoping their efforts at the 'drome will be rewarded with a batch of "B" certificates.

**Empire Day.** Castle Bromwich Aerodrome.—The club's PROFESSOR was exhibited at Castle Bromwich Aerodrome during the "Air Day" display, as the first sailplane to cross the Channel, and ten-thousands of un-air-minded people prodded, poked and bent it; still, it was a great triumph. The PROFESSOR proved the centre of interest in the hangar, and survived with no more damage than a rent in the elevator.

**June 4th, Castle Bromwich.**—A good attendance and a north-east wind of about ten to fifteen m.p.h. promised some good sport, and the PRÜFLING was soon being auto-launched, several members making flights of from 30 to 33 seconds, but it remained to Olver to do one of 45 seconds towards his "B" certificate.

One member then proceeded to put the PRÜFLING into a T.V. dive from about a height of forty feet, and stood it on the hook, fortunately without injury to himself. Members adjourned to the appropriate portion of the "Midland Aero Clubhouse" to discuss this tendency of the PRÜFLING.

**June 11th, Whit Tuesday.**—A number of the luckier members, still being on holiday, gathered at Castle Bromwich during the afternoon, and the nacelled DAGLING, which had been rigged to take the place of the PRÜFLING, was soon ready for auto-launching. There was a north-west wind of about twenty m.p.h. (several members stayed away because they thought it to be too rough), and nearly all members managed to make the 30 second mark. Then came the rain, and tea.

The rain stopping, operations were commenced once more, and some record heights for the club were obtained. Major Bill obtained his "A" certificate, and the members retired to the club house to celebrate at his invitation, thus terminating a successful day in the proper manner.

**June 18th.**—The PROFESSOR was brought out of the hangar, and several of the members had a ground-hop to get the feel of it. It is hoped to use the PROFESSOR for "B" tests.

## New Gliding Clubs

**East Grinstead.**—At a meeting held at the Crown Hotel on June 13th it was decided to form a gliding club. The prime mover of the scheme is Mr. G. J. Smith, of "Tolskity," Sackville Lane, East Grinstead, Sussex. Mr. Smith flew his first glider in 1912. He tried to form a similar club a few years ago, but support was lacking. The chairman of the new club is Capt. R. C. Corliss, Church Army.

**Oxted.**—A proposal is on foot to form a gliding club, possibly in collaboration with the one at East Grinstead.

**Tunbridge Wells.**—Mr. K. Fripp, of the Southdown Gliding Club, wishes to hear from any gliding enthusiasts who would like to form a gliding club for Tunbridge Wells district. His address is 68, The Pantiles, Tunbridge Wells.

**Blackburn.**—At a meeting held at Blackburn on June 6th, the East Lancashire Gliding Club was established. It was announced that after inspection of several sites one was selected

at "Top o' the Heights," near "New Inns," York. A glider had already been purchased from a member of the committee, and would be ready for use in a fortnight. Information regarding the Government subsidy was being sought before fixing the membership fee. Application for membership should be made to the secretary, Mr. J. Crossley, 116, Higher Audley Street, Blackburn.

**Nottingham.**—The Nottingham Gliding Club, recently re-started, has decided on a site at Burton Joyce as the most suitable one available. Efforts are being made to obtain a second-hand glider with which to start operations. At a meeting on June 6th, it is reported, Mr. W. S. Bullivant took the chair, and Mr. A. L. Slater, of Matlock, gave a lecture on his soaring experiences.

A similar lecture was given by Mr. G. O. Smith, also of the Derbyshire Gliding Club, to the Derby Technical College on June 12th, using the Editor's collection of slides.

**Perth.**—The club's first outing with a glider took place in the middle of June on the lower reaches of Kinnoull Hill.



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